

Application No.: 09/556,671
Response dated July 15, 2009
Reply to an Office Action of April 15, 2009
Docket No.: 792-21 RCE II
Page 9

Remarks/Arguments:

Introduction

Claims 1-9, 11-15, 17-24, 27-31, 33-37 and 41-46 are pending.

Claims 1 and 23 have been amended to further describe the endoluminal prosthesis as comprising, *inter alia*, a curved segment along a longitudinal portion of the device. Claim 46 has been added. Claim 46 represent “amended” claim 1, but without the cell shape limitations.

No new matter has been added with these claims amendments.

Entry of these claim amendments is respectfully requested.

Interview on July 1, 2009

Attorney for the Applicant thanks the Examiner for the telephonic interview on July 1, 2009. Proposed amendments to independent claims 1 and 23 were discussed during the telephone interview in view of the applied art. These proposed claims substantially correspond to the currently amended claims 1 and 23 with just a minor word change. No agreement on patentability was reached as the claim amendments may require additional searching and/or consideration by the Examiner. There was an apparent indication by the Examiner that the proposed claim amendments discussed during the interview removed the applied references as being at least anticipatory reference(s).

During the interview the examiner requested that the Attorney for the Applicant further discuss the drawings in this reply to the office action. In particular, the examiner requested a discussion of the claim limitation of the wires and their turns being distributed substantially

equally and uniformly along the segment of curvature. It is respectfully submitted that this limitation is fully supported by the specification, including the drawings, as follows.

For example, Figures 1 and 5 are described in the Specification as depicting prostheses suitable for curved bodily lumens, as follows:

“Fig. 1 shows a side view of a stent 1 in which the axis of the stent bends away from a straight line and is curved from the proximal end of the stent to the distal end. This curve is designed to match the natural anatomical geometry of the body lumen which is to be stented.” (Specification, page 8, paragraph beginning with “Fig. 1 shows...”, lines 1-4)(emphasis added)

“Fig. 5 shows stent 1 of Fig. 1 as manufactured for placement in an iliac vessel, such as iliac artery 17. ... [T]he curved stent is ... [created] with performed curves that approximate a general range of anatomical geometries.” (Specification, page 10, paragraph beginning with “Fig. 5 shows...”, lines 1-5) (emphasis added)

With reference to independent claim 1, the subject limitation is discussed in the specification, as follows:

“In the case of the anatomically correct stent, the curved mandrel provides a basis for as equal a distribution as possible of the wire as it is wrapped around the mandrel. ... Wrapping the wire around a curved mandrel allows for an equal distribution of wires and turns along the length of the stent and therefore and [sic] equal vessel support force once the stent is deployed in vivo.” (Specification, page 20, paragraph beginning with “In the case...”, lines 1-4)(emphasis added)

Such equal distribution of wires and their turns is further depicted in Fig. 21, which the above portion of the Specification is so directed towards. For convenience of the Examiner, Fig. 21 is reproduced below, as follows:

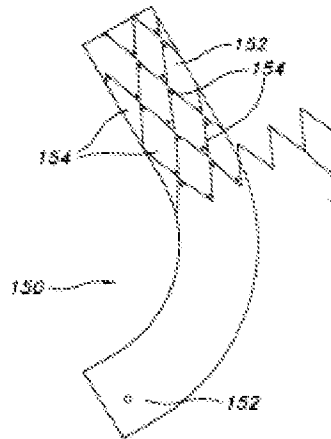


FIG. 21

Independent claim 23 differs from independent claim 1 in that it contains, *inter alia*, a limitation about the prosthesis being disposed on a straight mandrel. In this case the prosthesis is produced in an “uneven” manner on a straight mandrel so that when it is removed from the mandrel it becomes cured into the desired anatomical shape, as follows:

“The wire 5 is wrapped on a straight mandrel 162 such that in the area of the eventual stent curvature, variable amounts of wire and in effect, varying cell size is used. Using a larger pitch on one side of the stent and a smaller [pitch] on the other [side] would create an area of curvature. ... Once the stent is removed from the mandrel it would bend naturally into the curvature imposed by the unequal distribution of wire around the stent. ... [T]he desired anatomical shape ... [may be formed by] letting the wrappings slip into correct positions.”
(Specification, page 20, paragraph beginning with “Were the stent designed...”, lines 4-15)

Such “uneven” distribution of wires is further depicted in Fig. 22, which the above portion of the Specification is so directed towards. For convenience of the Examiner, Fig. 22 is reproduced below, as follows:

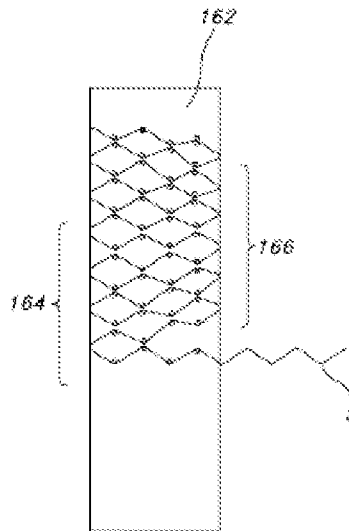


FIG. 22

Thus, Attorney for the Applicant respectfully submits that the drawings, which have been previously accepted by the Office, adequately and fully depict the claimed limitations of the independent claims.

Section 102 Rejections

Claims 1, 2, 8, 9 11, 15 and 17 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 5,405,377 to Cragg et al (hereinafter “Cragg”). Applicant respectfully traverses.

The Examiner applied Cragg by arguing this its straight stent 10 (see, e.g., Fig. 1 and/or Fig. 10) would have uniform distribution of wires when viewed in a cross-sectional plane of the stent. In other words, the examiner had asserted that the tubular wall structure of Cragg has the “segment of curvature” as required by the claims. While not necessarily agreeing with the

assertion by the Examiner, the independent claims have been amended to positively describe that the inventive prosthesis has a curved portion along its longitudinal axis of length, as opposed to merely being a tubular body. Such a tubular body merely has a curved portion along its circumference, i.e., a circular cross-sectional shape.

Thus, Applicant respectfully submits that Cragg fails to disclose the independent claims of the subject application.

Therefore reconsideration and withdrawal of the rejections of the claims under 35 U.S.C. §102(b) are respectfully requested.

Section 103 Rejections

Claims 3-7, 18-24, 27-31, 33-37 and 42-45 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over Cragg in view of U.S. Patent No. 5,855,598 to Pinchuk (hereinafter "Pinchuk"). Applicant respectfully traverses.

As discussed above, Cragg fails to teach or suggest a curved stent having, *inter alia*, wires and their turns being distributed substantially equally and uniformly displaced along the length of the segment of curvature, because Cragg, *inter alia*, fails to teach or suggest such a longitudinally disposed curved portion as set forth in the independent claims.

Pinchuk, however, fails to cure the deficiencies of Cragg. Figures 15 and 17 of Pinchuk were cited by the Examiner. These figures, however, fail to teach or suggest uniform distribution of wires along its length of the stent incising the area of bifurcation, which is apparently being applied as a segment of curvature by the Examiner. Figures 15 and 17 of Pinchuk are directed to delivery of the Pinchuk stent, in particular showing the use of guide wires for stent delivery. The actual stents in these figures, however, are not particularly detailed. Moreover, the stent of Figures 15 and 17 of Pinchuk are directed to braided stents. Pinchuk depicts his braided stent in

Figure 1 and describes it at column 5, lines 18-27. Such braided wires, however, do not read on the present invention because, *inter alia*, the braided stents do not have helically wound undulating wires. Thus, Figures 15 and 17 do not teach or suggest the present invention.

Assuming *arguendo* that the wires in Figure 7 of Pinchuk may be considered as helically wound undulating wires, Pinchuk nevertheless fails to teach or suggest such wires and their turns as being distributed substantially equally and uniformly displaced along the length of the segment of curvature, as set forth in the independent claims. For example, assuming *arguendo* that the area of bifurcation may be viewed curved segment, this area of bifurcation does not include any undulating wires. Such lack of wires thereat does not provide for uniformly distributed wires throughout the area of bifurcation or curvature.

Accordingly Pinchuk fails to cure the deficiencies of Cragg.

Thus, Cragg and Pinchuk, individually or in combination, fail to teach or suggest the present invention.

Therefore, reconsideration and withdrawal of the rejections of the claims under 35 U.S.C. §103(a) are respectfully requested.

Summary

Therefore, Applicant respectfully submits that independent claims 1, 23 and 46, and all claims dependent therefrom, are patentably distinct. This application is believed to be in condition for allowance. Favorable action thereon is therefore respectfully solicited.

Should the Examiner have any questions or comments concerning the above, the Examiner is respectfully invited to contact the undersigned attorney at the telephone number given below.

Application No.: 09/556,671
Response dated July 15, 2009
Reply to an Office Action of April 15, 2009
Docket No.: 792-21 RCE II
Page 15

The Commissioner is also hereby authorized to charge payment of any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 08-2461. Such authorization includes authorization to charge fees for extensions of time, if any, under 37 C.F.R. § 1.17 and also should be treated as a constructive petition for an extension of time in this reply or any future reply pursuant to 37 C.F.R. § 1.136.

Further, please kindly send all further correspondence relating to the subject application to the attorney of record at the address indicated below.

Respectfully submitted,

/John S. Sopko, Reg. #41,321/
John S. Sopko
Registration No.: 41,321
Attorney for Applicants

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(973) 331-1700